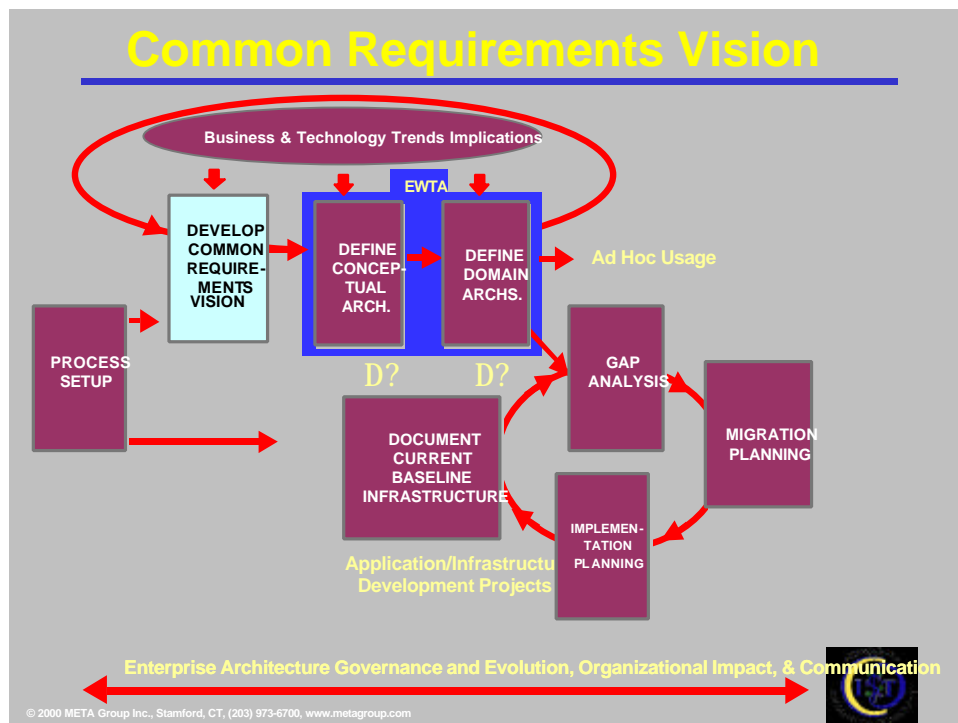
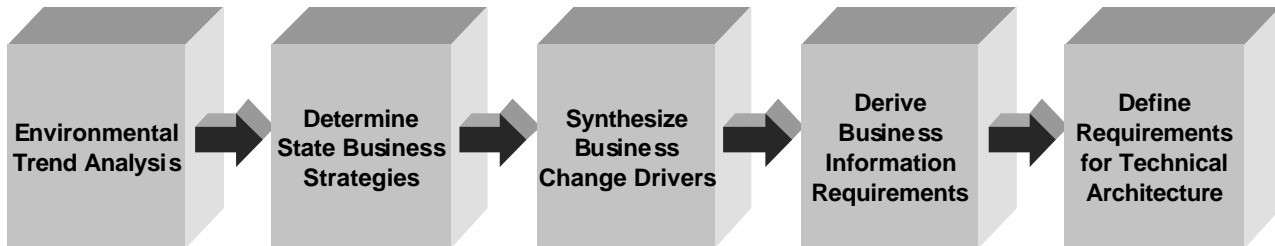


# Enterprise Architecture Common Requirements Vision

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**Figure 1 The typical process steps for the first phase of the EWTA process**



### Environmental Trends

The first step of the architecture teams was to identify influencing environmental trends, that is the internal and external forces impacting the agency business (*examples: organization, customer, legislative*). In addition, the team identified the important technological trends that can impact business strategies. The team then reduced these to the common or shared trends.

- Increasing need for faster, more complete access to agency information by personnel in the field and local service providers (including school districts), to improve service delivery and worker productivity.
- Increasing demand for electronic storage and delivery of state resources (e.g., documents, video testimony, digitized historical objects)
- The politics of public sector information - charging for service, information sharing, privacy, and equal access - will require legislative clarity because of the impediments that current laws bring to E-government.
- E-Government services provided via a single point of entry (and possibly customizable portals) will increasingly cut across three jurisdictions: employee services, suppliers, and constituents.
- Increasing use of private sector services to fulfill agency mandates and improve agency effectiveness
- Increasing recognition that, with most states competing for jobs and business growth, technology is a major enabler to foster a "business friendly" environment (e.g., partnering for workforce management)
- Increasing need for various government entities (e.g., Federal, State legislature, State agencies, municipalities) to share information quickly and easily, especially for performance reporting and program coordination
- Government organizations are purchasing comprehensive packaged solutions (e.g., core financial package software), because the resulting systems are integrated and they facilitate business process improvements.
- Continuing advancements in wireless connectivity and voice recognition will enable field personnel to spend more time with clients using a "location-less office" that allows for access to agency systems and services anywhere in the State.
- Decreasing number of skilled workers available for State government positions (e.g., retiring "baby boomer" employees, fewer "Gen-Xers", competing private sector opportunities) without a corresponding decrease in volume of work
- Increasing need to assure the public's trust in the services and activities of state agencies as automation use increases
- Increasing demand by elected officials and the public for easy electronic access to many routine agency services (e.g., self-service license renewal and payment)
- Increasing demand by the public (citizens, municipalities and businesses) and commercial enterprises for access to State government information
- Increasing legislative pressure for inter-agency integration and coordination, especially for real-time applications (e.g., fingerprint checking with FBI, CLIC/HELP, Medicaid, child welfare)
- Increased focus on strategic planning and performance measurement by State agencies

## Common Requirements Vision-- Environmental Trends

- The evolution of technology is occurring more quickly than the planning, budget and even procurement cycles. This results in acquisitions that are often obsolete, even before they are deployed.
- Using a "constituent relationship management" approach will dramatically change the current models for call centers.

### Business Strategies

The architecture team then reduced the list of business responses to the environmental trends to the most important business strategies. These strategies represent the responses that the enterprise will use to effectively deal with the shared environmental and technological trends.

- Increase the use of electronic forms and workflow as replacements for current paper based processes (e.g., applications for permits and licenses) for faster and better service.
- Increase the sharing of data/ information among more and different groups (e.g., Federal, municipalities, other agencies, citizens, and suppliers).
- Increase the use of third parties to deliver some agency services and develop appropriate systems for quality management and oversight.
- Build common I/T infrastructure through consolidation, centralization, and standardization.
- Move toward 100% electronic collection and distribution of data and information.
- Increase the use of tools like videoconferencing and telecommuting to reduce agency costs.
- Develop the policies and procedures for secure and appropriate access to State information by various constituents (e.g., citizens, other agencies, and the Federal government).
- Establish a single entry point for multiple services both within and between agencies (e.g., employer looking to relocate to state, parent looking for services for their child).
- Increase the variety of ways that customers can do business with the State (e.g., license renewal via the web, kiosks, or in person).
- Replace the core systems (e.g., accounting, personnel, payroll, and procurement) used by most agencies (e.g., ERP initiative).
- Increase the number of mobile workers within the agencies and increase the amount and quality of information available for them to do their jobs.
- Increase data consolidation and analysis of agency information for multiple purposes (e.g., performance measures, policy enhancement).
- Expand and enhance distance learning capabilities in the State of Connecticut.
- Add geographical references to data and information so that location or proximity can be used in analysis and reporting.
- On-going training of users and technical staff to keep up with changes in technology and systems, and to promote more effective use of technology resources
- Increase the education of legislators and other policy makers on the importance of technology to the performance of agency mandates and the limitations/ impacts of current rules governing state technology usage (e.g., privacy).
- Increase the use of case management approaches, especially across agency boundaries.
- Deliver individualized services as close as possible to the location of a client or customer to improve accessibility and acceptable outcomes (e.g., using third party providers, neighborhood facilities or remote access).
- Extend the benefits and access to technology to the economically disadvantaged, non-English speakers, and the disabled populations of the State.

### Enterprise Business Drivers

Once the important trends and business strategies had been determined, the architecture team then developed the *Business Change Drivers*. Each *Business Change Driver* is a "theme" that represents a related set of environmental trends and business strategies. These become the IT and business objectives or activities that must be accomplished and done well.

BD 1 - Provide for appropriate and necessary sharing of information within and among agencies and branches of government to increase accuracy and efficiency and to optimize State services.

BD 2 - Provide for increased partnerships with private sector, non-profit organizations, and other public sector organizations.

BD 3 - Leverage the Internet

BD 4 - Develop more flexible agency staffing options to address the shortage of skilled employees and the need to increase their effectiveness (e.g., empowering employees, "doing more with less".)

BD 5 - Provide easy and secure access to timely, appropriate and understandable information and services for all constituents.

BD 6 - Provide policy makers and senior agency managers of all branches of government with increased decision-making capabilities.

BD 7 - Provide for increased remote access by employees for operational information and technical support.

BD 8 - Facilitate the view that information is a Statewide resource held in trust for the public.

BD 9 - Improve critical processes (e.g., eligibility, service authorization, permits, licensing, electronic payments) for State services provided to the public.

BD 10 - Adopt solutions that enable collaboration among agency staff and suppliers/service providers regardless of location.

BD 11 - Provide sound stewardship of programs and funds to enhance accountability to the public for state government performance.

## Business Information Requirements

### Business Information Requirements

The architecture team then identified the information required by the business decision-makers and activities needed to satisfy the enterprise Business Change Drivers:

- What information is needed?
- Who needs it?
- When (how often) is it needed?
- Where does it come from?

BIR 1 - Provide anytime, anywhere access to all appropriate state systems, information and services as soon as practical

BIR 2 - Provide Internet access to all state employees in all branches

BIR 3 - Publish the rules and guidelines for the disclosing of State information to all constituents through multiple technologies

BIR 4 - Provide electronic links to systems and information (both real time and summary) maintained by Federal, State, local agencies or other partners Deploy applications that use web technology to make services more accessible and easier to use

BIR 5 - Enable the consolidation of information about clients, constituents, partners, etc.

BIR 6 - Provide an easily accessible directory of available information across the State

BIR 7 - Use the Internet to facilitate the acquisition and disposal of goods and services (e.g. procurement, surplus)

BIR 8 - Have a single login or point of contact to appropriate information and services

BIR 9 - Provide a seamless, and consistent user experience in accessing systems and information through multiple technologies

BIR 10 - Provide common information in understandable ways (e.g., language of requestors, 'plain' languages, comprehensible)

BIR 11 - Provide program performance monitoring information to staff to assess progress in carrying out legislative intent, meeting established performance goals and targets, and to properly measure programs

BIR 12 - Provide management with necessary resource & demand information to enable timely, flexible and accurate staffing decisions from internal and external resources

BIR 13 - Provide state-wide skills inventory information to agency management

BIR 14 - Provide electronic means for training of existing staff

BIR 15 - Enable common qualification & centralized registry of partners across all branches of government (master contracts, performance history) and partner analysis

BIR 16 - Enable the easy sharing of appropriate information with third parties (e.g. suppliers, providers)

BIR 17 - Provide mobile access to all state field workers in all branches

BIR 18 - Provide a means to make agency business information portable and support work when outside of the office

BIR 19 - Provide for electronic identification and authorization, (i.e., "digital signatures"), a means of on-line payment for and verification of services received

## Business Information Requirements

- BIR 20 - Provide the means to automate the monitoring and modeling about critical business processes and the information used by those processes
- BIR 21 - Provide the ability to utilize common business processes across all agencies
- BIR 22 - Provide for the automation of business processes
- BIR 23 - Provide the capability to handle an increased volume of data and an increased number of external information sources
- BIR 24 - Provide the means to determine and analyze the impact of legislative and regulatory requirements
- BIR 25 - Enable the collection and analysis of information about other states (e.g., incentives, contracts, infrastructure investments)
- BIR 26 - Provide geographic references in data and information and the ability to analyze this data
- BIR 27 - Provide a means of sharing information across organizational boundaries
- BIR 28 - Provide increased facilitation of structured forms of collaboration (e.g., routing of approvals, forms processing, etc.)
- BIR 29 - Provide for statewide access to all appropriate state information regardless of its location or its steward
- BIR 30 - Ensure that information is made available while protecting state assets and personal privacy (e.g., client confidentiality)

### Requirements for Technical Architecture

The final step is to translate the business information requirements into requirements for technical architecture, that is, **WHAT** is required of the technical architecture to support the business information requirements? **NOT HOW** the requirements will be satisfied.

RTA 1 - The EWTA shall support a shared data and information infrastructure environment that provides flexible access to a consolidated data source. Data will be defined by standard definitions stored in a common repository and will be maintained by clearly identified data stewards.

RTA 2 - The EWTA will provide the ability to collect, model and analyze the state's information (e.g., financial, client, constituent) and external information (e.g., market development, demographic) across the enterprise for decision making and accountability.

RTA 3 - The EWTA will enable direct constituent access, from multiple locations, via multiple methods and media, to appropriate information.

RTA 4 - The EWTA will enable an increase in the types and quantity of internal business metrics collected, monitored and analyzed for use by management.

RTA 5 - The EWTA will provide common application and data integration mechanisms to facilitate process interoperability and information exchange. Support should exist to exchange management and operational information within the organization (e.g. agency, judicial) and with outside entities.

RTA 6 - The EWTA will support the capability to provide 7 x 24 business operations and an enterprise-wide systems management capability (e.g., event alert monitoring, performance analysis, capacity planning, etc.)

RTA 7 - The EWTA will enable the ability to support, capture, store, and display constituent interactions and their preferred type of interaction with the state and its partners.

RTA 8 - The EWTA will provide all employees, where appropriate, with cost effective connectivity to the public Internet (e.g., news services, research, and customer collaboration), the state's Intranet (e.g., human resource, organizational news, training) and other specialized information providers (e.g., extranets.)

RTA 9 - The EWTA will provide a means to deliver training through mediated information and instruction where the teachers and students are not co-located.

RTA 10 - The EWTA will provide support for productive teamwork including file sharing, email, application sharing, white boarding, audio and video teleconferencing, and work routing.

RTA 11 - The EWTA shall provide secure access to all computing and information resources for mobile workers.

RTA 12 - The EWTA will provide unified directory services that integrate the existing identification, routing, connectivity, and access control functions of our computing environments. Establish common directory services for security, Domain Naming Services, e-mail, authentication, authorization, and device access using enterprise-naming standards.

RTA 13 - The EWTA will provide enterprise wide systems that support the creation, capture, storage, publication and retrieval of documents, images and other information rich objects that are used within agency processes or are exchanged with external organizations and constituents.

RTA 14 - The EWTA will provide comprehensive security and confidentiality mechanisms as well as access rights management to ensure compliance with contractual, regulatory and other legal information requirement.